



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,240	09/23/2005	Kustaa Nyholm	PLANMECA-250968	2216
54942	7590	05/18/2010		
Cozen O'Connor 277 PARK AVENUE 20th Floor NEW YORK, NY 10172			EXAMINER NGUYEN, KIMNHUNG T	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 05/18/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto@cozen.com
ggress@cozen.com

Office Action Summary

Application No.

10/550,240

Applicant(s)

NYHOLM, KUSTAA

Examiner

KIMNHUNG NGUYEN

Art Unit

2629

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9 and 11 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/20/10 has been entered.

2. This application has been examined. The claims 1-9 and 11 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl (US 5,300,926 admitted by applicant) in view of ROWE (US 2003/0048259).

As to claim 1, Stoeckl discloses in figs. 1 and 8, a dental apparatus which comprises a dental device, a graphic display (display elements, see col. 8, line 37-38) and a user interface (touch screen keyboard 74, fig. 8) connected functionally to one another (see serial interface 73), the user interface (74) being arranged to be used for controlling functions (by soft keys or foil

keys 61-62, fig. 7 (see col. 8, lines 20-30) of the dental device, wherein the user interface is a touch screen keyboard (74), and the graphic display (display elements) comprises means for showing symbols (light spots) describing the control functions of the dental device (see col. 8, lines 38-53) and a cursor (see picture screen cursor, see col. 7, lines 62-63), and the dental apparatus further comprises means for moving (see by hand, see col. 8, lines 22-24) and controlling the cursor (picture screen) in response to a touch of a pointer means (start point, see col. 10, lines 3-12) and its movement should be on the surface of the touch screen keyboard 74, (see when displaying the visual field by a picture screen, to arrange a foil keyboard or a touch screen on the picture screen, see col. 8, lines 20-22). However, Stoeckl does not specifically disclose the user interface is a touchpad which is arranged separately from the graphic display and comprises a contact surface for detecting both press and movement, and the cursor is arranged to be controlled by both pressing on the contact surface of the touch pad and by sliding on it.

ROWE discloses in fig. 1, a computer system (5) comprises a touch pad (20) which is arranged separately from the graphic display (display screen 10) and comprises a contact surface (see touch pad surface 23 that provides an indication of the point on the surface of the touch pad that a user's finger or stylus or the like is touching, fig. 2 [0019]) for detecting both press (touched by finger) and movement (graphic cursor is moved), and the cursor is arranged to be controlled by both pressing on the contact surface of the touch pad and by sliding on it [0023], [0028].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the touch pad which is arranged separately from the graphic display and

comprises a contact surface for detecting both press and movement, and the cursor is arranged to be controlled by both pressing on the contact surface of the touch pad and by sliding on it as taught by ROWE into the dental apparatus of Stoeckl having graphic display elements for producing the claimed invention because this would provide any point on the touch pad will move the graphic cursor in the direction indicated by the direction of the finger is slid [0028].

As to claim 2, Stoeckl discloses the dental apparatus further, wherein the functional connection between the touch screen keyboard and the graphic display is arranged through a computer (see touch screen keyboard control the individual functions of the apparatus by hand, and the visual field can also be provided with soft keys, see col. 8, lines 24-30).

As to claim 3, Stoeckl discloses the dental apparatus further, wherein the touch screen keyboard is arranged to control the computer functionally connected to the dental device (physician's device 2, col. 4, lines 60-66).

As to claim 4, Stoeckl discloses the dental apparatus, wherein the touch screen keyboard (74) is arranged to control the dental device through the computer (see col. 8, lines 22-30).

As to claim 5, Stoeckl discloses a dental apparatus further, wherein the pointer means (start point). However, Stoeckl does not disclose specifically the pointer means is a pointer pen or finger. ROWE discloses in figs. 1-2, a touch pad (20) comprising a pointer is a pen or finger (point in region 30, with a finger or stylus, [0021])

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the pointer means is a finger or pen as taught by ROWE into the apparatus having graphic display of Stoeckl for producing the claimed invention because this

would provide the reference that moves a predefined graphics cursor to a location on the associated display screen that corresponds to the point touched [0021].

As to claim 9, Stoekl discloses a dental apparatus, wherein the touch screen keyboard is integrated into the dental device (physician's device 2, col. 4, lines 60-66).

As to claim 11, Stoekl discloses a dental apparatus, wherein the touch screen keyboard (74) is arranged to form control information (microcontroller 70, fig. 9) for the dental device through the computer (touch screen keyboard, see col. 8, lines 22-30) so that the control information (70) is modified on the basis of the patient information included in the computer (corresponds to microcontroller controls the individual operator elements are connected to the serial interface 73, and controlling a drive motor for adjusting the height of the dental chair, see col. 8, lines 66-68, and col. 9, lines 1-9).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoekl (US 5,300,926 admitted by applicant) in view of ROWE (US 2003/0048259) as applied to claim 1 above, and further in view of FRICKER et al. (US 2001/0013855).

As to claim 6, Stoekl and ROWE do not disclose further the touch pad comprises a capacitive or a resistive contact surface. FRICKER et al. disclose in figs. 1-2, a digital system (100) having a touch pad (200) comprising a capacitive sensor 230 and a resistive sensor 210, see fig. 2, see 0045).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the digital system having a touch pad comprising a capacitive sensor and a resistive sensor as taught by FRICKER et al. into the dental apparatus having a graphic display

of Stoeckl and ROWE for producing the claimed invention because this would provide the capacitive sensor will the presence of a finger, but will not detect the presence of a pen (see Stoeckl, see 0052).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeckl (US 5,300,926 admitted by applicant) in view of ROWE (US 2003/0048259) as applied to claim 1 above, and further in view of Lordo (US 5,558,371)

As to claim 8, Stoeckl discloses a dental apparatus, having touch screen keyboard. ROWE discloses a contact surface. However, Stoeckl and ROWE do not specifically disclose wherein a detachable and disinfected or disposable film is arranged to be attached to the contact surface.

Lordo discloses in fig. 1, a resuscitator apparatus comprising a detachable and disinfected and disposable film is attached to the squeeze bag (see col. 12, lines 8-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the a detachable and disinfected or disposable film as taught by Lordo attached to the contact surface of ROWE's system for producing the claimed invention because this would provide a product of low cost and high reliability and also easy to perform by any hospital technician or other health care worker (see col. 12, lines 11-12 and lines 15-16).

Allowable Subject Matter

7. **Claim 7** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a dental apparatus which comprises a dental device, a graphic display and a user interface connected functionally to one another, the user interface being arranged to be used for controlling functions of the dental device, wherein the user interface is a touch pad, and the graphic display comprises means for showing symbols describing the control functions of the dental device and a cursor, and the dental apparatus further comprises means for moving and controlling the cursor in response to a touch of a pointer means and its movement on the surface of the touch pad. The combination of the closest prior art of Stoeckl (US 5,300,926), FRICKER et al. (US 2001/0013855) Smith (6,204,837) and Lordo (US 5,558,371) shown a similar invention, however they fail to teach or suggest that wherein the touch pad is arranged to form control information for the dental device in response to the fact that the contact surface of the touch pad is pressed or something slides on it so that the material layers included in the touch pad touch one another at the a point in question, in which case the a current flow is interrupted in the an electrode network included in the touch pad.

Response to Arguments

8. Applicant's arguments with respect to claims 1-9 and 11 filed 4/20/10 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMNHUNG NGUYEN whose telephone number is (571)272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimnhung Nguyen/

Examiner, Art Unit 2629

Application/Control Number: 10/550,240
Art Unit: 2629

Page 9